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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/428,453	10/28/99	MOTOHASHI	S 35.C13980

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EXAMINER	
RODEE, C	
ART UNIT	PAPER NUMBER
1753	8

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademark

Office Action Summary

Application No.	Applicant(s)
09/428,453	Motohashi et al.
Examiner	**Group Art Unit**
Christopher RoDee	1753

☒ Responsive to communication(s) filed on *19 Dec 2000*.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *three* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *7-28* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *7-28* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. § 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-12 and 18-20 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

It appears that applicants are claiming either 1) the photoreceptor while it is being charged (for claims 10-12, only), 2) a combination (presumably an apparatus) having the photosensitive member, the particles scraped from the photosensitive member, and the charging means, or 3) a process of charging and scraping the photoreceptor (in the unit for claims 18-20). The first and third options mentioned are improper because claims to the article or apparatus and a method of using the apparatus in the same claim are not statutory subject matter. Claims which embrace or overlap two different statutory classes of invention set forth in 35 U.S.C. § 101 are improper because § 101 is drafted so as to set forth the statutory classes of invention in the alternative only. *In Ex parte Lyell*, 17 USPQ2d 1548, 1551 (Bd. Pat. App. & Inter. 1990).

The independent claims are seen as reciting a functional limitation of the surface layer in the scraping limitation.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 7, 8, and 10-28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 7, 8, and 10-28 (except claim 17) require the determination of the scraped particle weight to be made with a member as defined in claims 9 and 17. See specification p. 8, l. 3-9. The length of scraping surface will materially affect the amount of toner obtained (spec. p. 15, l. 18-21), and there is no disclosure of determining this functional limitation for any and all lengths.

Claims 8 and 16 do not find basis in the specification as filed. The specification fails to state that there is no developer on the photosensitive member's surface layer. To the contrary, the specification states that the photosensitive member is scraped by a cleaning member (see spec. p. 7, l. 25-26; p. 15: Experiment 1; claims 7, 10-12). The cleaning member is used to remove developer from the surface of the photosensitive member after development and transfer (see spec. p. 4, l. 9-24). The object of the instant invention is to reduce member surface layer wear caused by the cleaning member when toner is removed (spec. p. 7, l. 13 - p. 8, l. 2). The specification clearly shows that the artisan would exp ct developer on th surface layer when the noted rubbing and scraping takes place. There is no reason to use the cleaning member if

developer is not present. The current claim limitation is not described by the specification and is, in fact, contrary to the specification. In consideration of the response's remarks concerning certain prior art rejections, the Examiner notes that Experiment 1 does not state that toner or developer is not present.

Claims 10-12 and 18-20 present new matter because the only disclosure of a charging member is a charging roller in contact with the photosensitive member (spec. p. 22-23 and Figures 2 and 4).

Claims 13 and 22 are not described in the specification as filed because the only description of the charge generation layer and the charge transport layer as components of the photosensitive member is when the charge transport layer is the surface layer. See specification p. 11 and Figure 3A.

Claims 15-20 and 26-28 require an image bearing member. Dependent claims 21-25 state that the image bearing member is an electrophotographic photosensitive member. The specification describes the image bearing member and the electrophotographic photosensitive member as alternative expressions for the same article. See specification page 7, lines 15-16. Because applicants are attempting to further define the image bearing member as an electrophotographic photosensitive member in dependent claims it appears that they consider the "image bearing member" to be broader than the electrophotographic photosensitive member. This broader scope does not have basis in the specification. The only described image bearing member is an electrophotographic photosensitive member. All other members included within the scope of "image bearing member" are new matter. If the terms have the same scope then dependent claim 21 is objectionable under Rule 75(c) as not further limiting claim 15.

Claims 10-12 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in instant claims 10-12 and 18-20 if applicants are claiming the photoreceptor while it is being charged, a combination (presumably an apparatus) having the photosensitive member, the particles scraped from the photosensitive member, and the charging means, or a process of charging and scraping the photoreceptor. Applicants are reminded that the claims must be limited to a single statutory class of invention as set forth in § 101 (e.g., article, process, etc.). A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990). If applicants are claiming the photoreceptor while it is being scraped and charged then this would appear to be a process claim rather an article or apparatus claim.

The current functional limitation in the independent claims is proper (response p. 8).

Claim Rejections - 35 USC §§ 102 & 103

Claims 7-10, 13-18, 20-24, and 26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Oshiba *et al.* in US Patent 5,721,085.

The Examiner has carefully reviewed the cited reference and considered applicants' remarks. The specification evidence has been reviewed in detail, as it was relied upon in the response. Based upon this consideration, the rejection is applied to the newly submitted claims for the reasons that follow.

Oshiba discloses a process and apparatus where a photosensitive member **10** (i.e., photoreceptor) having a charge generation layer **3** and a charge transport layer **4** and **5** are charged by a charging means **11**, imaged **12** by a digital or analog device, developed by a developing unit **13**, and transferred by a transfer device to a receiver (col. 6, l. 44-67). After transfer the photoreceptor is cleaned with a cleaning blade **19** that scrapes the surface layer of the photosensitive member in a direction opposite the direction of rotation. The cleaning removes remaining toner particles **19c** that visualized the image from the surface if the photoreceptor (see Figs. 2 & 3). The surface charge transport layer of the photoreceptor has a charge transport compound, a polycarbonate binder and 2.0 μm fluororesin fine particles, which are present in an amount of 10-70 grams per 120 grams of binder and 100 grams of charge transport material (Table 1; col. 9). Fluororesin particles and polycarbonate resins are used in the instant specification to produce the results of the invention.

The fluororesin fine particles in the surface layer appear to inherently be removed by the cleaning blade in the weight amount and size claimed during the cleaning step because they are contained in amounts and sizes while dispersed in the class of binder taught as useful by the instant specification (see Figure 5; spec. p. 12, l. 26-27 & p. 14, l. 13-14). The evidence in the specification indicates that various comparative examples with fluororesin particles amounts encompassing the amounts exemplified in the reference give the requisite scraped particle sizes and amounts with the scope of the claims (Comparative Examples 3 and 4 and Embodiment 1).

In the traversal applicants state that the references fail to describe the claimed properties. While this is accurate, it is not necessary for a referenc to appreciate or describe the inherent properties of the article or composition to anticipate the claimed. See *In re Fitzgerald*, 205 USPQ

594. With respect to the § 103 rejection, the Examiner notes applicants' remarks in the response. However, the evidence does not specify the composition of the inventive or comparative examples and does not compare with the closest prior art, which does contain fluororesins. Further, certain comparative examples produce results within the scope of the claims (e.g., scraped particle weight, scraped particle size). Because the evidence does not compare with the closest prior art and does not specify the composition of the inventive and comparative examples, the rejection is maintained.

Claims 7-9, 15-17, and 21-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Okado *et al.* in US Patent 5,733,702.

As discussed previously, Okado discloses a photoreceptor having a surface layer containing fine PTFE resin, a charge transport biphenyl compound, and a polycarbonate resin (Example 1; cols. 25-26). Polycarbonate resins and PTFE are shown in the instant specification as producing the results of the instant invention. The fluorine-resin containing particles having a preferred size of from 0.05 to 2.0 μm (col. 17, l. 12-25). The reference states that the surface of the photosensitive member's surface layer is mechanically abraded (col. 16, l. 1) by a cleaning blade (col. 15, l. 27 - 16, l. 12) during cleaning of the photoreceptor surface. The fluorine-resin fine particles in the surface layer are removed (i.e., abraded) by the cleaning blade (col. 23, l. 18-25) during the cleaning step.

In their traversal applicants again state that the reference fails to describe the claimed properties. While this is accurate, it is not necessary for a reference to appreciate or describe the inherent properties of the article or composition to anticipate the claimed. See *In re Fitzgerald*, 205 USPQ 594. The Examiner has provided sufficient reason to believe that the

charging means) that are detachably mounted to an image forming apparatus are well known in the art.

It would also have been obvious to place Oshiba's photosensitive member in a process cartridge because Hanami discloses that process cartridges are alternative embodiments for the automated production of images given the disclosure of image forming apparatuses. Further, process cartridges are well known in the art. The use of the obvious photosensitive member in a known process cartridge is *prima facie* obvious for the production of images for home or office copying.

This rejection is seen as applicable to the instant claims for the reasons given for the primary reference above.

Conclusion

Any inquiry concerning this communication should be directed to Exr. Christopher RoDee at telephone number 703 308-2465 or via the receptionist at 703 308-0661 for general or status inquiries. Submissions by fax may be accepted at the following telephone numbers:

Official fax: 703 872-9310
After Final fax: 703 872-9311
Unofficial fax: 703 305-6078

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PRIMARY EXAMINER

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1	A...	1
2	CLM	3
3	REM	6

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